

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013464**Date Inspected:** 28-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR

CWI Name:	M. Gregson, J. Salazar, G. Mundt			CWI Present:	Yes	No
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No N/A
				Delayed / Cancelled:	Yes	No N/A
Bridge No:	34-0006			Component:	Hinge K Pipe Beams	

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

Hinge-K Pipe Beam Assembly 101A-3:

The QA Inspector observed Production Lead Troy Smith and WID #B62 (Marcus Belgarde) attaching 2 slings around the Fuse 120A-4. Lead Troy Smith explained to the QA Inspector that the slings were being attached, in preparation for lifting the Fuse and placing on the mechanical rollers. Once the slings were around the Fuse, the QA Inspector observed WID #B62, utilizing the hand held control box for the overhead shop bay crane, to lower the lifting cable and attached hook. The QA Inspector then observed Lead Troy Smith attaching the previously placed slings to the hook. The QA Inspector then witnessed WID #B62 utilizing the hand held control box, to operate the shop crane and gradually lift the Fuse from the shop floor. While the Fuse was being lifted, the QA Inspector observed Lead Troy Smith handling the Fuse to control the movement, during the lifting. The QA Inspector then observed the Fuse being gradually guided to a stationary set of previously placed mechanical rollers. The QA Inspector noted that this Fuse was being placed, for the fit-up to Forging assembly 102A-4. Once the Fuse was in place above the stationary set of rollers, the QA Inspector then witnessed WID #B62, utilize the hand held control to gradually lower the Fuse on the set of rollers. Once set on the rollers, the QA Inspector observed Lead Troy Smith and WID #B62, gradually guide the Fuse to the Forging, to start fitting up the weld joint. The QA Inspector noted that this weld joint is designated as an AWS D1.5 Complete Joint Penetration (CJP) B-U7-S. Lead Troy Smith explained to the QA Inspector that the fit-up will continue to the end of this shift and will probably not

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start tack welding the joint, until the following day, 4-29-10. Lead Troy Smith explained that OIW QC personell will be notified, prior to the tack welding. Per the contract requirements, OIW QC personell are required to inspect the fit-up before welding the joint. See attached pictures below.

Hinge-K Pipe Beam Assembly 102A-3:

The QA Inspector was informed by OIW QC Inspector Jose' Salazar that informal Visual and Magnetic Particle testing (VT/MT) had been performed on the critical Weld Repair (CWR #2244-024), weld joints #W1-118 and #W1-103. QC Inspector Salazar explained that no rejectable indications were found, during the informal testing. QC Inspector Salazar then explained that the final MT will be performed on swing shift, by QC Inspector Gary Mundt.

The QA Inspector was present on this swing shift and performed visual testing on the CWR #2244-024, weld joint # W1-118 and #W1-103. The QA Inspector found no rejectable indications on the weld joint #W1-103. The QA Inspector discovered weld overlap on the weld joint #W1-118, near the weld termination of the joint. The QA Inspector marked the area for grinding and blending on the part, with a yellow paint marker. The QA Inspector then informed OIW QC Inspector Gary Mundt that the area will need grinding, prior to the final MT being performed. QC Inspector Mundt explained that if he performs the final VT/MT on these weld joint, that he will notify production personell to perform the grinding. See attached picture below.

Material, Equipment, and Labor Tracking (MELT)

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project.

The QA Inspector observed at Oregon Iron Works: 4 OIW production personell and 2 QC Inspectors.



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Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
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Reviewed By:	Adame,Joe	QA Reviewer
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